

AMENDMENTS TO THE CLAIMS

Please amend claims 1, 13, 18 and 20 as follows.

1. (currently amended) In an electronic device, a method, comprising the steps of:
providing color data for a group of pixels and building an initial palette with the color data, wherein, for each pixel in the group of pixels, the color data ~~corresponds to a color representation~~ is stored in an the initial palette at an indexed position, the indexed position being determined based on the color data;
converting the ~~color data for the group of pixels by using~~ initial palette to a converted color palette and for each pixel in the group of pixels substituting ~~the~~ color representations in the converted color palette at the indexed position for the color data.
2. (original) The method of claim 1 further comprising the step of using a host function to determine the indexed position in the initial color palette for each of the pixels in the group of pixels.
3. (original) The method of claim 1 wherein the initial color palette is for a (R, G, B) color space.
4. (original) The method of claim 3 wherein the converted color palette is for a (C, M, Y, K) color space.
5. (original) The method of claim 3 wherein the converted color palette is for a (C, M, Y) color space.
6. (original) The method of claim 1 wherein the initial color palette is for a grey scale color space.
7. (original) The method of claim 1 wherein the converted color palette is for a grey scale color space.
8. (original) The method of claim 1 wherein the electronic device is a computer system.

9. (original) The method of claim 1 wherein the electronic device is an image-reproducing apparatus.
10. (original) The method of claim 1 wherein the electronic device is a copier.
11. (original) The method of claim 1 wherein the electronic device is a printer.
12. (original) The method of claim 1 wherein the group of pixels comprises a row of pixels.
13. (currently amended) In an electronic device, a method, comprising the steps of:
providing a set of color data for pixels, said color data encoding colors for the pixels in a first color space;
~~providing a first color palette for the first color space, wherein the first color palette holds representations of colors in the first color space in respective positions and wherein each of the positions has an associated index;~~
for each of the pixels, determining an index for the pixel ~~of a selected one of the positions in the first color palette for given areas of the representations of colors that correspond to~~ based on the color data for the pixel;
building a first color palette, wherein the first color palette holds the color data at a position of the index;
converting the first color palette into a second color palette for a second color space, wherein each position in the second color palette holds a representation of a color in the second color space that corresponds to a representation of the color in the first color space at a like position in the first palette; and
converting the set of color data to encode colors in the second color space, for each pixel, by substituting the representation of color in the second palette at the position of the index for the pixel for the color data of the pixel.
14. (original) The method of claim 13 wherein one of the first color space and the second color space is a (R, G, B) color space.

15. (original) The method of claim 13 wherein one of the first color space and the second color space is a grey scale color space.

16. (original) The method of claim 13 wherein one of the first color space and the second color space is a (C, M, Y, K) color space.

17. (original) The method of claim 13, wherein the method is performed by a processor.

18. (currently amended) A device for converting color representations of a set of pixels, comprising:

a storage facility for storing a first palette for a first color space, wherein the first palette holds color representations of a set of pixels at positions of indices, the indices being determined based on the color representations of the set of pixels; and

a conversion facility for converting the set of pixels to representations in a second color space, said conversion facility converting the first palette for the second color space and using representations in the second palette to convert the set of pixels.

19. (original) The device of claim 18 wherein the conversion facility is implemented by a processor.

20. (currently amended) An improved method of converting a group of pixels from a first color space to a second color space, comprising

mapping color image data in the first color space to indices of an initial color palette array, wherein each position of the index of the initial color palette array ~~corresponds to a unique color combination~~ holds the color image data in the first color space,

converted the color image data ~~mapped~~ in the initial color palette array to ~~an~~ a converted color palette array comprised of color image data in the second color space,

reconstructing the group of pixels in the ~~output~~ second color space using the converted color palette array.

21. (original) The method of claim 20, further comprising a step of using a hash computer programming function to determine the indexed position in the initial color palette array for each of the pixels in the group of pixels.

22. (original) The method of claim 21, wherein the indexed position of the pixels is also stored in a palette index array at a location in the palette index array that corresponds to a location in the group of pixels.

23. (original) The method of claim 20 wherein the initial color palette array is for a (R, G, B) color space.

24. (original) The method of claim 20 wherein the converted color palette array is for a (C, M, Y, K) color space.

25. (original) The method of claim 20 wherein the converted color palette array is for a (C, M, Y) color space.

26. (original) The method of claim 20 wherein the initial color palette array is for a grey scale color space.

27. (original) The method of claim 20 wherein the converted color palette array is for a grey scale color space.